

March 28, 2013

Ms. Jeanne Townsend
Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95814-0100

Dear Ms. Townsend:

I would like to thank the State Water Board both for the opportunity to comment on the Substitute Environmental Documentation (SED) for the update to the Bay-Delta Plan, and for its commitment, evident in the update process, to protect public trust resources with regard to instream flows in California's rivers. This is a long-untended issue for California's environment, which grows more critical by the year as ongoing pressures on water supply are amplified by changing rainfall patterns and drought related to climate change. We commend staff for their hard work developing these draft flow and salinity objectives for the update.

The Partnership, one of 28 National Estuary Projects established under the federal Clean Water Act, is a coalition of local and regional resource agencies, non-profits, citizens, and scientists working to protect, restore, and enhance water quality and fish and wildlife habitat throughout the Estuary, which includes the Sacramento-San Joaquin River Delta. We are a state, federal and local effort. Our foundational document, the Comprehensive Conservation and Management Plan (CCMP) was approved in 1993 by both the Governor of California and the Administrator of the US Environmental Protection Agency, thereby giving the weight of both governments to the recommended actions.

The CCMP emphasizes what we have long understood: Freshwater flows throughout the Estuary's vast watershed – and especially from the San Joaquin and Sacramento rivers and their tributaries – comprise a major limiting factor for the health of the Estuary as a whole. Specifically, the amount, timing, and variability of freshwater flows into the Bay define the quality and quantity of estuarine habitat. The success of our work and the work of all our partners to protect and restore the health of the Bay depends on healthy freshwater inflows into the Bay-Delta.

In 2011, the Partnership published the *State of the Bay Report* (please see <http://www.sfestuary.org/about-the-estuary/sotb/>), which comprehensively describes the health of the Bay, measured by ecosystem attribute criteria, such as water (quality and quantity); habitats; ecological processes; and living resources. The Report's analysis revealed that the estuary is now essentially in a chronic state of drought:

Results of this analysis reveal a steady decline in springtime estuarine open water habitat, from consistently good or fair conditions prior to the 1960s to mostly poor conditions by the 1990s.

Conditions improved during the late 1990s, during a sequence of unusually wet years but declined again in the 2000s. Declining habitat conditions were driven by reductions in all three component measurements of the indicator—frequency, magnitude and duration of

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inflows. In the 1940s and 1950s, high quality open water habitat occurred on average in 70 percent of years. By the last decade, it occurred in just 37 percent of years, with the average location of [the intersection of fresh and salt water in spring] shifting upstream nearly 7 kilometers. The number of days with good habitat conditions during the spring has declined by two thirds, from an average of 100 days per year in the 1940s and 1950s to just 43 days per year in the most recent decade.¹

Reduced quantity and quality of springtime estuarine open water habitat impairs the health of the Bay. This seasonal estuarine habitat, which is closely linked to the abundance and survival of many of the Bay's native fish and shrimp species, is often associated with (and created by) high flow "flood events," normal ecological processes that transport nutrients to the Bay, promote productivity, and improve food availability for Bay fish and wildlife. The connection of such variable flows to both ecological processes and living resources underscores the importance of improving freshwater inflow conditions during the spring – if we are to achieve the CCMP goals of increasing freshwater availability to the Estuary and restoring healthy estuarine habitat, as well as the objectives of the Bay-Delta Plan.

Thus the Phase 1 update to the 2006 Bay-Delta Water Quality Control Plan (Plan) is a signal opportunity for the Board to establish flow criteria and a flow regime that will meet the objectives of both the CCMP and the Plan, and protect the beneficial uses assigned to the Bay and Delta. These uses include shellfish harvesting, commercial and sport fishing, cold freshwater habitat, migration of aquatic organisms, spawning, reproduction, and or early development of fish, estuarine habitat, wildlife habitat, and rare, threatened, or endangered species.

Phase 1 will set the tone as well as the precedent for Phase 2 (flow standards for the Delta and the Sacramento River). Therefore it is essential that Phase 1 be complete and completely effective in setting protective flow and salinity standards for the San Joaquin River and its tributaries.

Unfortunately we find significant deficiencies in the SED, and in staff's approach to Phase 1. We concur with the comments made by U.S. EPA in their letter of March 27, 2013 and ask that the Board revise the SED accordingly. Additionally we have the following recommendations:

1. **Project objective statement:** We generally support the narrative objective statement for Alternatives 2, 3, and 4, although we strongly recommend that "reasonably controllable measures" and "conditions that reasonably contribute toward maintaining ..fish populations" be clearly defined:

Maintain flow conditions from the San Joaquin River Watershed to the Delta at Vernalis, together with other reasonably controllable measures in the San Joaquin River Watershed, sufficient to support and maintain the natural production of viable native San Joaquin River Watershed fish populations migrating through the Delta. Flow conditions that reasonably contribute toward maintaining viable native migratory San Joaquin River fish populations include, but may not be limited to, flows that mimic the natural hydrographic conditions to which native fish species are adapted, including the relative magnitude, duration, timing, and spatial extent of flows as they would naturally occur. Indicators of viability include abundance, spatial extent or distribution, genetic and life history diversity, migratory pathways, and productivity.

Achievement of this objective will more fully support the Boards' public trust responsibilities as well as the recovery of salmon and steelhead, keystone species for the Bay as well as the Delta.

However, we find that several key aspects of the SED indicate that this objective may not be achievable unless the scope of the project is modified and a different alternative is selected.

Spatial and temporal scope of the proposed project: We understand that the complexity of flow

¹ San Francisco Estuary Partnership, The State of San Francisco Bay 2011, pp. 26-27. Available at http://sfep.sfei.org/wp-content/uploads/2012/12/11SFEP_STATEofSFBAY2011.pdf

issues in the upper watershed are significant, but the SED fails to explain the rationale for only addressing the lower San Joaquin River/San Joaquin River Basin and Southern Delta. Upper watershed contributions to flows must be taken into account when planning for the health of the Delta and salmonid fisheries. The Board should analyze the effects of restoration flows in the upper reaches on recommended flows at Vernalis. Additionally, limitation of standard setting to February-June will potentially leave young salmonids stranded, or in lethally warm waters, during critical life stages. In this nearly totally managed system, flows must be regulated year-round in order to keep temperature and dissolved oxygen, to name just two key factors, at levels healthy for fish.

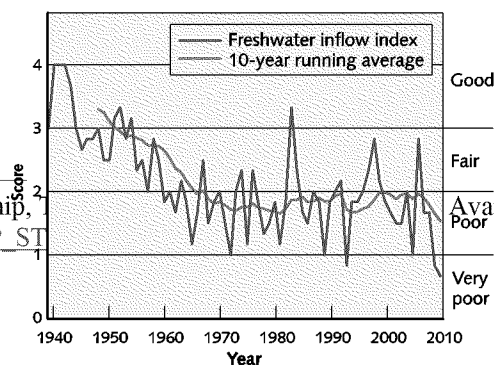
2. **Selection of the preferred alternative percentage of unimpaired flows:** We find the SED's statements supporting the adequacy of the 35 percent standard, which is very close to current conditions, to be inappropriate in light of the narrative objective.

We further note that the SED does not state that an objective of 35 percent of unimpaired flows in the February-June timeframe will contribute to restored fisheries. If indeed the Board intends to accomplish the narrative objective for Alternatives 2, 3, and 4, then the Board needs to select an alternative more closely in line with accepted science, and most specifically with the Board's own 2010 Delta flows report. We acknowledge the "Note to Readers" that prefaces the online version of that report; however, we respectfully remind the Board that the objective of the current project, as stated in the SED and quoted above, is to restore the Delta's salmonid fishery. Fisheries experts from both the agricultural and environmental communities gave testimony at last week's hearing agreeing with the Board's peer reviewer, Professor Olden, that 35 percent of UF is insufficient to meet the project's objectives.

3. **Impacts of the proposed project against baseline:** The California Environmental Quality Act (CEQA) gauges a project's impacts against a "baseline" of current conditions. In the case of Delta flows, this is problematic as baseline conditions in the Delta and in the salmon fisheries that depend on the Delta, are already severely degraded. To quote from the Partnership's 2011 State of the Bay report:

All of the key characteristics of freshwater inflow – amounts, variability, peak flows and dry year frequency – [have been] adversely affected. Since the 1970s, overall flow conditions have been mostly poor and, in the past two decades, occasionally very poor. During the 2000s, annual inflows were reduced by more than 50 percent on average and springtime inflows by nearly 60 percent compared to historic levels. In 2020, only 30 percent of estimated springtime unimpaired runoff from the Bay's watershed actually flowed into the Bay. Both seasonal and year-to-year variability have been reduced and, in 2010, the frequency of peak flood flows was reduced by 90 percent. In effect, based on the amounts and patterns of actual freshwater inflow, the Bay is being subjected to chronic drought conditions: 2010 was the eighth year out of the past 10 in which the total annual amount of freshwater flow into the Bay was the same (or less) than what it would have been under unimpaired conditions in a "critically dry" year. Despite above average runoff in the watershed, inflow conditions in 2010 were very poor, and the Freshwater Inflow Index (see figure,) was the lowest on record.²

² San Francisco Estuary Partnership, <http://sfep.sfei.org/wp-content/uploads/2012/12/11SFEP-ST>



Therefore, we urge the Board to recommend flow standards that take into account the already severely degraded baseline conditions.

4. **Impacts of the revised salinity standard:** Easing the salinity standard in the southern Delta may indeed not create impacts for agricultural uses, but it may well affect flows and temperature if a higher standard allows the Bureau of Reclamation to reduce releases of water in to the system. We urge the Board to analyze these impacts.

Thanks again to the Board for the opportunity to comment on this important document. We look forward to a revised SED.

Sincerely,

Judy Kelly
Director